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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,029	06/18/2001	Akira Tobiya	2257-0189P-SP	8800
2292	7590	06/23/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			NGUYEN, JENNIFER T	
			ART UNIT	PAPER NUMBER
			2674	11

DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/882,029

Applicant(s)

TOBIYA, AKIRA

Examiner

Jennifer T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed on 04/15/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-7,10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-7, and 10-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is responsive to RCE filed on 04/15/2004.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-7, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Someya et al. (U.S. Patent No. 6,300,931).

Regarding claims 1 and 7, referring to Figs. 1, 5, and 7, Someya teaches a gray level conversion method, applied to a device comprising: a conversion section (7-9) for obtaining a conversion signal by applying a conversion process to an input signal (i.e., red, green, and blue video signals) in accordance with a first characteristic; and a display element (21) for executing a display with a gray level in accordance with a second characteristic with respect to a value of said conversion signal, wherein said first characteristic is set by using said second characteristic and a third characteristic (240) with respect to said gray level in association with said input signal, wherein the third characteristic is arbitrarily set, the method comprising the steps of: (a) finding a value of said gray level given by said third characteristic (240) in response to a set value of the input signal; (b) finding said second characteristic using said conversion signal obtained from said conversion section by adopting a first character; (c) finding the value of said conversion signal that gives said value of said gray level found at said step (a) in accordance

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with said second characteristic (col. 2, lines 27-58, col. 3, lines 16-67, col. 4, lines 1-56, col. 5, lines 38-54, and col. 6, lines 1-14 and 25-62).

Someya differs from claims 1 and 7 in that he does not specifically teach the characteristic that makes said input signal and said conversion signal virtually equal to each other as said first characteristic. However, Someya suggest the input signal and the conversion signal can be adjusted at any level (col. 6, lines 49-58). Therefore, it would have been obvious to obtain input signal and said conversion signal virtually equal to each other as said first characteristic in order to compensate the different in the comparison.

Someya differs from claims 1 and 7 in that he does not specifically teach setting said first characteristic based on a relationship between said value of said input signal set at said step (a) and the value of the conversion signal found at said step (c). However, Someya suggest the output of the relationship between the value of the input signal set and the value of the conversion signal can input to the amplifiers and clamping circuit as first characteristic (Figure 5). Therefore, it would have been obvious to obtain setting said first characteristic based on a relationship between said value of said input signal set at said step (a) and the value of the conversion signal found at said step (c) as taught by figure 5 in the system of figure 7 in order to improve the liquid crystal display more significantly.

Regarding claim 4, Someya further teaches the value of said input signal is a digital value in said step (d) (col. 2, lines 45-47).

Regarding claims 5 and 10, Someya further teaches the display device (21) is a liquid crystal display.

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Regarding claims 6 and 11, Someya further teaches the gray level is luminance (col. 6, lines 30-36).

4. Applicant's arguments with respect to claims 1, 4-7, 10, and 11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jennifer T. Nguyen** whose telephone number is **703-305-3225**.

The examiner can normally be reached on Mon-Fri from 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reach at **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks


Washington, DC. 20231

Or faxed to: 703-872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, sixth-floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703-306-0377.

JNguyen
06/16/2004


REGINA LIANG
PRIMARY EXAMINER